This paper is an analysis of the policy innovations of the European Union’s Water Framework Directive and their relationship to a range of economic and geographical interests. It follows a previous paper describing the process of the making of the WFD in relation to the new EU co-decision process. This paper argues that the innovative aspects of the policy reflect a context in which the broader governance arrangements for water management in Europe are shifting in dramatic ways. The paper identifies the aspects of the WFD that are innovative by comparing it with previous European directives related to water management legislation. The paper then describes the state of Europe’s freshwater resources as a basis for understanding the regional geography of interests in the policy-making process and examines the contrasting interests of state, market and civil society institutions and their impact on the final draft. The paper ends by bringing the history of the WFD up to date by looking at the initial responses of the key actors to the final WFD and at recent developments in relation to implementation. Copyright © 2003 John Wiley & Sons, Ltd and ERP Environment.

INTRODUCTION

The European Union Water Framework Directive (European Commission, 2000d) is an overarching piece of legislation that aims to harmonize existing European water policy and to improve water quality in all of Europe’s aquatic environments. As we argued in the first part of this paper, the WFD is central to debates about a putative shift of institutional power within the European Union away from the Council of Ministers and towards the European Parliament in environmental matters (Jones and Clark, 2001). In this paper we focus more specifically on a far more pervasive shift in the mode of governing in
Europe and beyond (Jessop, 1997; Rhodes, 1997; European Commission, 2000b). This change is usually encapsulated in the phrase ‘a shift from government to governance’ and, in organizational terms, is illustrated in the rising influence of un-elected bodies, which are, in the broadest sense, non-governmental (private firms and their representative associations, quangos, civil society bodies and other lobbying groups). The statutory incorporation of public participation into the production of individual river basin management plans (WFD Article 14) illustrates the extent to which this shift is currently being codified in legislation. Across a range of policy arenas and spatial scales there is a desire to dragoon the public in general, and NGOs in particular, into the process of drafting policy (Curtin, 1999). The rubric around ‘stakeholder participation’ has become central to debates about methods of policy implementation, the moral accountability of the public and private sectors and the internalization of external social and environmental costs by individual private firms (Ackerman and Alstott, 1999; Burkitt and Ashton, 1996; Hutton, 1999; Fung and Wright, 2001). This paper analyses the way that this shift towards governance articulates with a range of geographical and economic interests in the field of water policy.

Bureaucrats in the Environment DG of the European Commission are certain that the WFD was greatly improved as a piece of legislation because NGOs were actively involved in the early stages of its production (Bloech, 2001). On the basis of this positive experience, the Commission is in the process of regularizing NGO participation as part of the current process of implementing the WFD (European Commission, 2001). This is a development that is welcomed in particular by environmental NGOs (Harrison et al., 2001; Saunders and Tickner, 2001; Scheuer, 2001), who are confident of public support and view public participation as a vehicle not only for making environmental policy more effective, but also for boosting the influence of their own position.

The paper sets out the innovative aspects of the WFD by contrasting this legislation with earlier phases in the development of European water policy. It then considers the state of Europe’s water resources as a basis for setting out the regional geography of lobbying interests between nation states. It concludes our historical account of the WFD by looking at the ways in which the key actors responded to the final draft directive and by drawing attention to some recent developments in relation to the implementation of the WFD.

**THE HISTORY OF EU WATER POLICY**

To understand the innovative elements of the WFD it is necessary to look at earlier directives associated with water policy, which are the baseline against which the WFD can be compared. The history of European legislation on water has undergone three distinct phases (Grimeaud, 2001; Kallis and Nijkamp, 2000). The first wave of European water legislation (1975–1988) was primarily concerned with public health and set standards for the quality of water used for drinking. It began with the Surface Water Directive in 1975 and culminated in the 1980 Drinking Water Directive, which set binding water quality targets. This first wave of legislation also set water quality objectives (WQOs) for different aquatic environments that could affect public health: the water used for fishing, harvesting shellfish or bathing. Though the focus was on public health, this phase also addressed more intrinsically environmental issues such as pollution control. The Dangerous Substances Directive, for example, established lists of harmful substances and set permitted levels of their discharge.

In the second phase of legislation (1988–1996), the priorities shifted away from the protection of public health and towards pollution control and environmental management. Following the Maastricht treaty, the European Union set out to establish a common
environmental policy. In 1988 the existing legislation on water was reviewed and a number of strategic changes were made. More attention was paid to preventing pollution emanating from urban wastewater and agricultural run-off. In particular, a concerted effort was made to set the level of permitted pollution by setting case sensitive emission limit values (ELVs) for different pollutants in different types of water body. These covered biological pollutants downstream from sewage treatment works (as in the Urban Wastewater Treatment Directive of 1991) or chemical pollutants from agriculture (as in the Nitrates Directive also 1991). This legislation depended on member states actively designating and monitoring areas that were vulnerable to pollution. In 1996 an attempt was made to treat these separate elements in a more coherent way through the Integrated Pollution and Prevention Control Directive. In parallel to this new emphasis on preventing pollution, the legal standards for drinking water sources were updated in the 1998 Drinking Water Directive, which introduced improved public access to information and clarified earlier legislation.

This tranche of EU directives was one of the driving forces behind dramatic investments in water treatment infrastructure during this period. This investment undoubtedly reduced point source pollution of water resources; however, diffuse source pollution (from agriculture and cities) remained a problem (EEA, 1998; CIWEM, 2000). Some member state governments delayed the process of translating the original directives into national legislation, which subsequently prevented their effective implementation at a regional scale. In particular, the directives related to nitrate emissions are notorious for low levels of compliance, despite heavy fines imposed by the EU (Environment Daily, 2001d), while directives on drinking water standards were met with better levels of compliance.

Since the 1970s there has been a marked improvement in river water quality according to some parameters (e.g. a 40–60% reduction in phosphorus emissions), but around 20% of Europe's surface waters are still dangerously polluted. Trends in groundwater (which supplies 65% of Europe's drinking water) are harder to identify because of the difficulties associated with monitoring and the slow (but highly variable) rate of change in groundwater quality (EEA, 1999c). By the late 1990s there was a sense in some quarters that it was necessary to strengthen the legislation to further protect water resources. In part this was a case of integrating separate but related directives, in part of updating directives to meet new scientific knowledge and in part of fortifying existing legal obligations to ensure better compliance. The European Environment Agency claimed in their 1998 annual report that after 25 years of European water legislation not only was the scientific community demanding more dramatic improvements, but to an ever increasing extent so were Europe's citizens and environmental organizations. This is a claim that is only now being questioned by some actors in water management, who argue that only when the costs of further improvements to water quality are translated into water bills will it be possible to make claims about whether or not this is something citizens want.

THE INNOVATIONS OF THE WATER FRAMEWORK DIRECTIVE

Seven key changes mark out the new legislation when compared with earlier phases (Table 1). First, Article 4 of the WFD integrates environmental objectives for water bodies that were previously treated separately: drinking water; bathing water; surface water and groundwater. The WFD also co-ordinates the strategies adopted to achieve these objectives. This innovation was more than merely a bureaucratic rationalization of the proliferation of existing directives. It was also an attempt to understand water quality within the broader scientific notion of an integrated
system. In this respect, whilst the WFD was new, it was, in many ways, an extension of ideas developed for the IPPC Directive.

Second, whereas in the past water management was organized around existing political administrative boundaries or around the use to which water was put, the new WFD organizes water management around river basins – a hydrological unit. As a result the new policy covers all water, whether it is used or unused. The policy does, however, still identify specifically vulnerable areas, which have special requirements and whose boundaries may or may not coincide with river basins. Some member states (UK, Germany and Spain) already use the river basin approach, but this is not the case everywhere. Under the WFD a ‘river basin management plan’ will need to be drawn up for each river basin – some of which will cross national frontiers. The plans will be updated every six years. This plan will have to include an analysis of the river basin’s physical characteristics, a review of the impact of human activity on the status of water in the basin, an assessment of existing abstractions and an economic analysis of water use in the district. Groundwater and coastal waters will be assigned to the most appropriate river basin district. River basins such as the Maas, the Schelde and the Rhine are already managed under cross-border agreements. However, the institutions associated with existing trans-national agreements were suspicious that the WFD’s overarching legislation and request for a new set of actors and institutions would threaten the existing arrangements and the negotiating powers of the actors currently involved.

A third new element introduced by the WFD is the amalgamation of two existing pollution control strategies: environmental quality standards (EQSs) and emission limit values (ELVs). DG Environment refers to this as the ‘combined approach’ to pollution control (Article 16). EQSs are the legal upper limits for the concentration of pollutants that can be measured in specified water bodies. ELVs are upper limits for the amount of the pollutant that can legally be released into the environment. ELVs are implemented through the introduction of either best available technology (in the case of point sources of pollution) or best environmental practice (in the case of diffuse sources). In the past, different member states emphasized different pollution control strategies, and so did different EU directives. The WFD, however, incorporates both strategies in an iterative combined process. ELVs must be applied first. If these fail to achieve existing EQSs then more stringent ELVs must be applied by the member states. The WFD sets ELVs for a list of 32 ‘priority substances’ in addition to those substances covered by the existing Nitrates Directive, the IPPC Directive,

Table 1. Innovations in the Water Framework Directive

<table>
<thead>
<tr>
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<th>Co-ordination of policies that previously addressed different water types separately, and co-ordination of water management strategies</th>
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<td>2</td>
<td>Switching to river management based on hydrological boundaries, not political administrative and national boundaries</td>
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<td>3</td>
<td>Introducing the ‘combined approach’ to pollution control by linking emission limit values to environmental quality standards</td>
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<td>4</td>
<td>Incorporating quantitative elements into environmental planning at the EU scale</td>
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<td>5</td>
<td>Redefinition of ‘good water status’ and redrawing of the list of priority hazardous substances</td>
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<td>6</td>
<td>Introduction of the costs of environmental externalities into water pricing in order to encourage demand management</td>
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<tr>
<td>7</td>
<td>Increasing public participation in policy-making in order to increase transparency and compliance</td>
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The criteria used to define ‘good water status’ were the fourth innovation introduced by the WFD. In the initial stages of negotiating the directive the precise definition of what constitutes ‘good water status’ was left open and considered only in broad terms. ‘Good surface water status requires a rich, balanced and sustainable ecosystem and that the established environmental quality standards for pollutants are respected. Good groundwater status requires that abstractions and alterations to the natural rate of recharge are sustainable in the long term, and that environmental quality standards for pollutants are respected’ (European Commission, 1998). However, as the debates developed, more precise definitions were required, particularly as environmental lobby groups continually returned to the question of making the criteria legally binding, which requires clarity, measurability and specificity. This was one of the major areas of controversy during the making of the WFD, and since the implementation process has begun it remains a question that concerns water suppliers because of the cost of achieving good water status.

A fifth innovation of the WFD was that it introduced regulations concerning water quantity management by addressing issues of abstraction volumes and recharge. The possibility of regulating water quantity allocation as a means of environmental management of European waters had previously been neglected. This directive, however, stipulates that each river basin management plan must ensure a balance between the abstraction and recharge of water. All abstraction of either surface water or groundwater will require authorization except in areas where it can be demonstrated that this will have no significant impact on the status of the water. The Commission claims that these provisions, together with the full cost recovery in water pricing, will contribute towards protecting water both as an economic and environmental resource.

So not only is this development innovative in relation to regulating water quantity, but also in relation to its close weaving together of environmental objectives with economic development targets and physical planning (Agence de l’Eau Artois Picardie, 2000).

The sixth major shift in policy marked by the WFD was the introduction of aspects of water pricing at full cost recovery (Article 9), an overtly economic tool, which initially appears to be ill placed within an environmental piece of legislation concerned with conservation and public health. This policy was justified as a means of controlling consumption in the face of unrelenting demand (Buckland and Zabel, 1996). The principle of full cost recovery became a very controversial issue in debates around water policy. Whereas some countries have a long tradition of charging for water others do not. Ireland, for example, supplies domestic water free and recovers the cost through taxation. The directive’s initial aspiration to introduce full-cost pricing for all water supplies (drinking, irrigation and industrial) was later ‘watered down’ through pressure from the Council of Ministers. Member states are now only required to ensure that the price charged to consumers for fresh water and for the treatment of wastewater will ‘take into account’ the full environmental costs. In order to accommodate national variations, provision was also made for derogations from full cost recovery. For example it was accepted that it was permissible to provide a subsidized drinking water supply and wastewater services for low-income households. The need to introduce local variation shows how the WFD inevitably encroaches on social policy, trade policy and competition policy as well as environmental policy.

A seventh and final major innovation of the WFD is related to widening participation in water policy-making (Article 14). The proposal for a WFD stated ‘establishing a framework for a common European water policy will require more involvement of citizens, interested parties, non-governmental
organisations (NGOs)' (European Commission, 1998). It specifically suggested that the establishment of the river basin management plans would require public access to information and extensive consultation. The proposed WFD also included plans to organize a biannual conference for a range of actors to exchange their experiences of trying to protect Europe’s waters. In addition it was proposed that a network for the exchange of information and experience between water professionals should be established across the European Union.

Listing the innovations within the WFD is important because it demonstrates that this is far more than a mere collation and harmonization of previous water-related directives. It introduced dramatic changes to European water legislation, including the incorporation of economic instruments and the requirement for public participation, whilst directly recognizing the need to change the arrangements for the governance of water in Europe. Not only do the changes foster the involvement of nongovernmental groups (representing environmental, social and consumer interests in water), but they also recognize the fact that an increasing proportion of water is supplied through private sector participants, which has intensified the commodification of water.

GEOGRAPHICAL INTERESTS AND THE STATE OF EUROPE’S WATER RESOURCES

Before turning to the changing relations between state, market and civil society in the field of water governance it is necessary to understand a completely different set of interests which also influenced the politics of the process of producing the WFD – namely geographical differences in the condition in and demands on Europe’s water resources.

Water has also been the subject of numerous detailed studies at a European scale that have focused on specific topics in relation to both quality and quantity (EEA, 1996a, 1996b, 1999a, 1999c, 2000a, 2000b; ETC/IW 1997, 1998). But variations in rainfall and in water demand make it difficult to draw generalizations about the sustainability of water supplies at the European scale and it swiftly becomes necessary to divide the Union into regions.

Though the largest volumetric users of water across Europe are power stations (32%), agriculture is not far behind (30%) and is far more important politically. As a generalization, agriculture is more significant in the South and the accession countries, which between them consume around 94% of Europe’s irrigation water (FAO, 1996; OECD 1996; WSSCC, 1995). Furthermore, the demand for irrigation water has been increasing in southern Europe over the last 10 years. Bureaucrats in DG Environment consider that irrigation water is underpriced and suggest that economic instruments could be used to make the use of water for irrigation more efficient. It is the vital importance of water for the economies of the European South that made the introduction of water quantity issues into the WFD a major point of controversy within the Council of Ministers. For example, the Spanish government maintained that by intervening in the management of water quantity the WFD was touching upon matters of national sovereignty, and for this reason they fiercely opposed the directive at every opportunity.

The proposals to regulate on quantity issues were at the heart of a North–South divide within the negotiation. However, this North–South divide is not quite as clear cut as it might seem at first glance. Despite the fact that there is more rainfall in northern Europe, there are also areas (for example Benelux, NE France and SE England) where intensive agriculture and industry have led to high levels of water resource exploitation. So there are places within the European North in which quantity issues are potentially politically as significant
EU WATER FRAMEWORK DIRECTIVE 2

as in the European South. Still, as a generalization, quality issues are more important in northern Europe where a longer history of industry and intensive farming has raised the profile of water pollution as a cause for concern. In particular, there is considerable public anxiety in northern Europe over the health impacts of nitrate pollution in water, derived from agricultural fertilizers and animal waste. The result is that there are still major concerns over eutrophication, organic pollution and acidification of water in rivers, lakes and groundwater. The interests of northern European farmers in the WFD were primarily concerned with sharing the costs of limiting diffuse pollution with the state and/or the general public.

At other scales there are also differences between nation states on the balance between water use and the objectives of conservation. Across the EU demand for public drinking water (14% of water use) is stationary or declining; however, this also masks considerable regional variation and relative success of various domestic demand management policies in different countries. Germany for example has had far more success in reducing domestic water demand than the UK in a broadly similar socio-environmental context (ICWS, 1996; OFWAT 1997). The introduction of policies such as environmental pricing, which are designed to provide incentives for domestic demand management, are likely to generate different political responses in different parts of the EU. This is also true of policies designed to take account of the impacts of future climate change (Arnell and King, 1997; Rees et al., 1997).

DIFFERENT ACTORS AND DIFFERENT INTERESTS IN WATER GOVERNANCE

From the beginning of the process of producing the WFD the European Commission was anxious to ensure that there was sufficient opportunity for consultation in drafting the legislation. Although the Commission’s intention to make this an open call was genuine, this process inevitably favoured those organizations that were large enough to support a Brussels based bureau, whether private companies, government agencies or NGOs. The result was that three groups dominated the consultation process: industry, governmental organizations at a variety of scales and environmental organizations. The following account highlights the interests of those who participated in the process of drafting the WFD.

Industry

Industrial interests were actively represented from the outset of consultation. Industry tended to lobby national governments and then exert their influence on the process through decisions made by the Council of Ministers. Of course, not every industrial group within the water sector had the same interests in this process, and some were indeed contradictory. For example, a large proportion of the chemical industry (from the producers of mercury for the medical sector to the producers of pesticides and fertilizers for farmers) as well as agriculture were staunch opponents of the WFD’s focus on diffuse source pollution and the control of hazardous substances. They lobbied the Commission both through ministers and directly through their European bureaus, such as the EFMA (European Fertilizers Manufacturers Association) and the ECPA (European Crop Protection Association). Farmers were, from the outset, aware that the burden of attempts to reduce nitrate pollution was likely to fall on their industry. The private water industry and the biotech companies, on the other hand, largely welcomed the attempt to tackle diffuse sources of pollution since they stood to gain from improved raw water quality, which would lead to reductions in drinking water treatment costs. However, the water suppliers have subsequently become
increasingly concerned that the costs of tackling diffuse pollution are likely to be passed on to consumers directly through water bills, which will be to the detriment of the industry’s public relations. The private water companies exerted their influence through the Brussels based group Eureau, through national representative organizations (such as BGW (German Gas and Water) or Water UK) and through the direct involvement of individual private companies (Ondeo, RWE-Thames) in the consultation process.

**Governments**

Much of the burden of implementing and paying for the changes proposed by the WFD will fall on the governments of member states, including the considerable cost of producing the river basin management plans. Apart from monitoring water quality this involves the time-consuming bureaucratic and expensive task of assessing water abstraction in a context where most governments have little information and no existing institutional infrastructure of abstraction licenses. The plans require a survey of the human impact on all water resources in order to produce an economic analysis that will then become the basis for moving towards full cost recovery. The interest of government bodies, therefore, lay in minimizing the obligation involved in the assessments and elongating the delivery period for the river basin management plans. Alternatively, national governments were looking to shirk the responsibility for producing these plans by shifting the task onto other scales of government, such as local governments, a move that appeared to sit comfortably with the EU’s principle of subsidiarity (Kraemer, 1998). As a result local authorities have often been identified as the main actors, though the exact source of funding that will enable them to deliver the river basin management plans is less clear and varies from country to country.

Many of the governmental authorities involved in consultation (such as the European Union of Water Management Associations (the EUWMA), the European Environment Agency (the EEA) and the national government bodies (such as the UK Environment Agency)) were sympathetic to the conservation aims and strategies of the WFD. Local government was less supportive, however, largely because the switch to river basins as the central organizing unit of water management meant that in some places power was being taken away from some municipalities. The public water industry (local government run water supplies for example) was not enamoured of full cost pricing since it came from a tradition of treating water as a public good rather than a commodity and it lobbied for derogations from cost-related aspects of the WFD.

**Environmental NGOs**

Some environmental NGOs were extremely active in the WFD consultation process at the European level: the EEB (European Environment Bureau – an umbrella organization of around 140 smaller groups), which was the leading institution, and received some funding from the Commission to perform the task of the ‘watchdog’; the WWF (World Wide Fund for Nature); the RSPB (Royal Society for the Protection of Birds); Birdlife International; and Waterpakt. Greenpeace were involved initially but later withdrew from the consultation. These NGOs all had Brussels offices or dedicated officers and funds specifically directed towards the WFD negotiations. In many respects they regarded the proposed directive as a unique opportunity to improve earlier legislation, but they also had detailed reservations about some of the proposed changes (Boymanns, 1997). Their campaign comprised a number of environmental targets, including the incorporation of the OSPAR agreement in the WFD and the pressure to make the WFD’s environmental targets legally binding for all member states.
The first area in which they sought amendments was in pollution control. The EEB welcomed the principle of the combined approach; however, they were concerned that it relied on vague qualitative standards (‘good’ and ‘very good’) and that it did not quantify emission limit values. They feared that some water bodies, which were clearly inside the category ‘good’, might be used as pollution sinks under such a system. For this reason, they opposed the way that the draft WFD distinguished between ‘protected’ and ‘polluted’ areas. Environmental NGOs were concerned that the lack of strict and quantifiable standards would make it difficult to set uniform legally binding objectives against which the actions of all member states could be measured. They concentrated on lobbying (particularly the Parliament and the Commission) for amendments that would secure the existence of quantifiable and time-limited objectives for a wider range of groups of hazardous substances. In a similar vein they also argued that the principles of the 1995 Esbjerg Declaration (which was the basis of the OSPAR Convention in 1998) should be incorporated into the WFD. Article 17 of that declaration stated that natural substances should only exist in natural concentration in the environment and that synthetic substances should attain a concentration close to zero. In other words it sought to establish a pristine aquatic environment, which should show no measurable human impact. To this end environmental NGOs aimed to get programmes of progressive emission reduction incorporated into the final WFD. Also in relation to the combined approach, they argued against Article 8, which allowed the use of polluted raw water as a drinking water source and contradicted the draft WFD’s endorsement of ‘the precautionary principle’. Instead they claimed (following European Commission, 1995) that it was more economically effective to prevent pollution in the first place than to have to treat polluted raw water to make it safe. In practical terms this meant ignoring the existing availability of drinking water purification technologies when setting up environmental quality standards.

Environmental NGOs were also worried that the WFD could end up repealing existing strict directives and replacing them with a weaker, vaguer framework, which allowed member states more scope for interpreting their obligations. They supported these concerns by observing that after 20 years of legislation some member states had still failed to take action to implement existing directives. Whilst the environmental organizations were fulsome in their praise of the Commission for their openness and transparency about the process of producing the proposal, they still felt that their participation was peripheral, because they were merely consulted about the WFD and had no substantial involvement in actual decision-making. Finally, environmental NGOs opposed the proposal (Article 12) to exclude the owners of wells, large industrial units and farmers from the ‘polluter pays’ principle and indeed argued that industry should pay for the research that was needed to set quantitative emission limit values (ELVs). They also proposed that all abstraction should be licensed and paid for on an increasing block tariff and that water conservation should be encouraged by incorporating metering, water efficiency standards for appliances, recycling and re-use schemes and leakage targets into the WFD.

THE REACTION OF STAKEHOLDERS TO THE FINAL DRAFT OF THE WFD

The three main groups who were involved in the production of the legal document (the Commission, the European Parliament and the Council of Ministers) fought ‘tooth and nail’ between 1998 and 2000 to secure the directive closest to their interests. But how did they react to the draft that finally emerged in December 2000? The European Commission was triumphant and viewed the WFD as a major advance. Throughout the drafting of the
directive, the Commission had played the role of the mediator between the other two bodies and was faced at least twice with the possibility that the directive (and many years of associated work) would be completely lost because the two bodies could not reach an agreement. It was not surprising, therefore, that the Commission celebrated when a final text of the directive was accepted by all relevant parties.

'This Directive is one of the most important legislative acts at Community level concerning the protection of the environment. It combines and co-ordinates the dispersed water legislation in force at present and enables the Commission and the member states to work with a credible legal framework in implementing the Community legislation which will apply for many years, before and after the enlargement' (European Commission, 2000a).

Some representatives of national governments, though less triumphalist in tone, were also apparently pleased with the result. For example, the UK Environment Agency characterized the WFD as being 'intellectually exactly just what we want' (Martin Griffiths, Head of Water Quality, EA). However, some of the other interested parties have been less enthusiastic.

The chemical industry is particularly concerned with the requirement for a cessation of emissions of hazardous substances. They claim that it will increase production costs significantly and argue that they are in a weak position relative to the water industry because the monopoly position of water suppliers ensures that price rises do not dramatically influence the volume of sales. Their complaint is that they will be expected to absorb a disproportionate share of the costs of environmental protection and that this will reduce their competitiveness. In particular, they argue that the cost of reducing priority hazardous substances to natural background levels far outweighs the benefits to be gained and they have asked for a 'realistic' definition of the zero emissions approach. The agricultural sector is equally concerned with the consequences of the WFD. Since one of the main targets of the new legislation is diffuse pollution, it is likely that farmers will have to absorb new costs, which again will be passed on to consumers, which, they fear, may reduce the competitiveness of their products, relative to those coming from outside the common market. All those branches of water management connected in some way to the cost of reducing pollution have subsequently suggested that the WFD is trying to 'goldplate' water quality.

In some respects the private water industry appears to be a winner within the industrial sector. The new emphasis on water pricing accords with their own discursive objective to shift the supply of water away from being described as 'a public service supplying a basic utility to water users' towards 'a business supplying a commodity to customers'. It is also expected that improved raw water quality should reduce water treatment costs, particularly if some specific pesticides are banned as a result of the WFD (Water-UK, 2001b). However, industry, particularly where privatized, is concerned that it will have to absorb the costs of quality improvements in a situation where the agricultural sector is not in a position to do so. This will mean that private water suppliers will pass the bill on to customers with further costs for their public reputation.

The water industry's anxieties seem to be justified in those cases where governments have begun to unveil their plans for implementing the WFD. In the UK, for example, the Government estimates that the implementation costs will be between £2 and £9 billion and that 40% of costs are expected to be borne by the water industry (DETR, 2001). The industry has responded by opening a debate about which costs are their responsibility and which costs should rightly be in government hands. The administration costs of the Directive should not be borne by water companies (and ultimately by water customers) they should be fully met by Government. The transposition of costs to water industry customers
EU WATER FRAMEWORK DIRECTIVE 2

masks the true costs and prevents a real debate over how environmental protection should be funded’ (Water-UK, 2001a).

In general, although every industry stakeholder publicly welcomed the principle of sustainable water management, and the combined and integrated approach to pollution control, they all (and notably the chemical industry and fertilizer producers) lobbied for derogations. The immediate effect of the WFD has been to intensify the importance of lobbying by industry over the drawing up of the list of priority hazardous substances.

The environmental NGOs were initially amongst the fiercest critics of the final text. On the morning after the second conciliation meeting, the EEB described the final text of the directive as a ‘disaster for the environment, embarrassing for Environment Ministers, the Environment Commissioner and the Parliament and a blow to the [environmental] credentials of the EU’ (Environment Daily, 2000). However, the EEB soon revised its initial negative assessment of the final text (Lanz and Scheuer, 2001). Though they reasserted their criticisms about the enforceability of the obligations and the lack of ambition in relation to groundwater protection, they acknowledged that (from their perspective) the Parliament delegation had achieved several improvements to the text. They sent a letter to all the major players expressing their gratitude for ‘the efforts and the achievements of the Conciliation Committee to improve the Council text’ (EEB, 2000a). This was tempered by their demand that the Commission now had to prove the credibility of the directive through effective implementation (EEB, 2000b, 2001b). As the Secretary General pointed out, ‘It depends very much on the good will and the seriousness of all players to fully use the opportunities of this directive for enhanced water protection and to prevent the abuse of the legal ambiguities of the agreed text’. Given the history of poor compliance of environmental policy in the past this comment takes on a sardonic quality.

DEVELOPMENTS AFTER CONCILIATION, MOVES TOWARDS IMPLEMENTATION

As the arguments over the wording of the new directive ended, the arguments over the interpretation and implementation of the directive began. The Commission’s experience with many water policy directives was that member states did little about implementation until coercive legal manoeuvres forced them into action. Such an approach was considered unsatisfactory because it was time consuming, bureaucratic, expensive and antagonistic. To avoid repeating this pattern with the WFD the Commission plans to develop advisory recommendations about the implementation process (Bloech, 2001). These will be in the form of non-binding guidance documents, which address specific areas of the WFD but which should enable member states to begin the implementation process swiftly (Environment Daily, 2001b). They will be produced by ten working groups comprising individuals from the Commission, from European statutory bodies (e.g. the EEA), from the governments of member states and from some non-governmental bodies. In order to become members of the working groups NGOs must meet criteria established by the Commission (European Commission, 2001). Outside this practical attempt to get implementation under-way political arguments have continued in three spheres: water pricing, drawing up the list of priority hazardous substances and interpreting the directive’s ruling on implementation deadlines.

It was ironic that even though the WFD opened with the claim that water ‘is not a commercial product’ and that the Council of Ministers had forced the demand that full cost recovery should be legally binding out of the final text, the first concern of the Commission has been ‘to provoke a debate, which will result in effective implementation of the water pricing article of the Water Framework directive. This will contribute to meeting the
environmental objectives of the directive in the most cost-effective way’ (European Commission, 2000c). Despite the fact that the WFD only says that member states must ensure that pricing policies provide an ‘adequate incentive’ to use water efficiently the Commission is pressing on with more ambitious plans to introduce full-cost pricing. DG Environment see ‘pricing’ as something of a panacea, as the principle upon which other policy sectors (such as agriculture) can be articulated with water policy. Effective water pricing is seen as the vehicle for environmental protection, lower costs and an equitable sharing of the financial burden of the WFD. It should be noted that the Commission do not state that pricing is the only instrument that can solve water resource problems. However, they do claim that pricing must be given due consideration to ensure it promotes more efficient and less polluting use of scarce water resources. In September 2000 a conference in Lille established that both the water industry and the environmental lobby were broadly sympathetic to the Commission’s proposals on pricing (Agence de l’Eau Artois Picardie, 2000). The Commission also continue to have strong support from the European Parliament on this issue (European Parliament, 2001b; Environment Daily, 2001c). However, given the vigorous opposition from the governments of member states in the past it seems likely that this trend will also meet stiff opposition in the future.

A second aspect of the WFD that became the subject of immediate debate was the list of priority hazardous substances whose emissions were due to be progressively reduced to zero within 20 years of the list being adopted. An initial list of 32 hazardous pollutants had been drafted in February 2000 and the WFD stated that the priority substances would be a subset of this list. In September 2000 the European Parliament Environment Committee demanded that the list should be expanded, their new list had 39 pollutants of which 24–28 were to be given priority status (European Parliament, 2000). The Commission dismissed this demand and proposed instead to divide the list of 32 substances into categories, ranked 1–5: those ranked 1 would definitely be put on the priority list; those ranked 5 would definitely not; those in between were open to debate. The criteria for ranking were legislative, medical, technical and economic. The strategy was given a cautious welcome by the chemical industry and also by environmentalists. The water industry lobbied hard that the cost of removing the pollutants ought to be a key factor in the assessment of whether or not they were included on the list (CIWEM, 2000). In January 2001 the Commission proposed to put 11 substances out of the original 32 onto the priority list, and definitely leave 10 off the priority list. The remaining 11 remained open for debate and were marked as ‘under review’ until 2003. In April 2001 the European Parliament Environment Committee accepted the list of 11 priority chemicals, but also shifted three more chemicals into the category ‘under review.’ In May 2001, MEPs voted on the list and, though they had some concerns about the speed with which the Commission intended to undertake the review of the list, it was passed largely as proposed (European Parliament, 2001a). The most recent development has come from the water industry, which has intensified a long running campaign by producing a list of nine pesticides they would like to see banned, only four of which are currently on the Commission’s priority hazardous substances list (Water-UK, 2001b).

The third area of controversy relates to the interpretation of the WFD text’s commitment to phase out the priority hazardous substances over 20 years. According to a legal opinion (Council of Ministers Legal Service, 2001), the directive does not oblige member states to adopt control measures resulting in zero emissions by the end of the 20 year period. Rather, it obliges the European Commission to forward proposals allowing this to happen. This leaves member states free to ignore those proposals should they wish. Environmentalists interpreted this as evidence that member states
EU WATER FRAMEWORK DIRECTIVE 2

‘are trying to escape from political agreed obligations by using backdoor legal interpretations’ (EEB, 2001a). The Environment Commissioner, Margot Wallström, admitted that she agreed with this interpretation of law and could not guarantee that the governments of member states would adopt the Commission’s proposals for zero emissions of priority hazardous substances (Environment Daily, 2001a).

So, far from being the end of an intense process of lobbying and interpretation, the adoption of the WFD in December 2000 actually marked a new beginning of another round of wrangling. Whilst this process has the advantage of a basic legal text, which forms a non-negotiable ground from which to operate, it has the disadvantage that this round of debate operates largely within the obscure bureaucratic realm as opposed to a transparent democratic one.

CONCLUSIONS

Implementing a common water policy in Europe has been difficult because EU member states have different, and sometimes opposing, views on environment and water quality protection and try to guard their national right to direct water use and allocation (Kraemer, 1998; Richardson, 1997). For example, upstream and downstream users of the same river basin may well have different views about the best strategy to be employed. Ten member states receive more than half of their water resources from neighbouring countries, so trans-boundary issues are a serious concern. Even in the UK such issues are becoming more relevant as devolution progresses. Many member state governments feel that not only their economic interests, but also their national sovereignty and freedom, are hampered by European environmental legislation. Thus, there is a long history of member states watering down the rigour of regulations through a process of attrition in the policy-making process. There is also a long history of poor compliance from a variety of member states after directives have been incorporated into national law.

Substantive differences with respect to water management exist not only between member states, but also between governmental and non-governmental sectors. These differences are increasingly important because of the privatization within the sector (Arthur Anderson, 2000; Swyngedouw et al., 2002). Increasing private sector participation in water supply has meant that water companies are keen to protect their economic interests, which may, or may not, accord with those of member states or other water companies. The regulatory regime imposed on member states through directives on water quality and management has involved substantial investment costs. The EU has allocated a special budget that will support the implementation of the WFD, but this does not cover the full implementation cost. Financial demands on governments have often been the trigger for member states to seek to out-source those costs onto the private sector. So, it could be argued that European Union directives have accelerated a move towards privatization at a national scale as member states seek to divest themselves of the economic burden of infrastructure investments (Hassan, 1995). However, as experience in the UK and France shows, a significant proportion of the implementation cost for the previous EU water directives was paid through state funds, in the form of tax breaks or cash injections for the water industry.

In this context of a shifting terrain of water governance with the tasks assigned to state, market and civil society all under debate, it is crucial that the European Commission continues to experiment with institutions through which deliberation can develop in a collaborative way. The attempts by DG Environment to institutionalize such dialogues in the preparation of the guidance for the implementation of the WFD are a reflection of the conviction that such variety produces better legislation in the first place and avoids costly enforcement subsequently. In this regard the Commission
should be given credit; however, there is little room for complacency and the imperative to innovate with participation remains. In this regard the key questions for such governance arrangements remain who participates and who chooses who participates.

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EU WATER FRAMEWORK DIRECTIVE 2


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